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AUTHOR Culp, Mary Beth; Spann, Sylvia
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ABSTRACT

A study investigated the effect of writing on reading comprehension, vocabulary, and attitude of college freshmen enrolled in a reading course. Thirty-eight students were randomly assigned to either an experimental or a control group. Reading instruction varied only in the use of a writing component for the experimental group. Instruments used in the study were the Nelson-Denny Reading Test and the Estes Attitude Scales. An analysis of covariance on reading test scores resulted in significant differences between groups on vocabulary and comprehension. No significant differences were found between the groups on the reading portion of the attitude scales. Although results indicated that writing has a positive influence on reading, they leave unanswered a number of questions about the long-term effects of the instruction. (FL)

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THE INFLUENCE OF WRITING ON READING

Mary Beth Culp, Ph.D.
Sylvia Spann, Ph.D.
College of Education
ILB 434
University of South Alabama
Mobile, Alabama 36688

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ABSTRACT

This study investigated the effect of writing on reading comprehension, vocabulary, and attitude of college freshmen enrolled in a reading course. Students were randomly assigned to experimental and control groups. Reading instruction varied only in the use of a writing component for the experimental group. An analysis of covariance on the Nelson Denny Reading Test scores resulted in significant differences between the groups on vocabulary and comprehension. No significant differences between groups were found on the reading portion of the Estes Attitude Scales. The researchers concluded that writing has a positive influence on reading performance but raised several questions about the writing-reading relationship.

The Influence of Writing on Reading

A relationship between reading and writing has long been acknowledged by authorities in both fields. Reading and writing are considered part of a total language process, with reciprocal inter-relationships, and several studies have indicated that some relationship does exist. Barbig (1968) and La Campagne (1968), found that better writers did significantly more voluntary reading than average writers. In a study of ninth graders, Maloney (1967) found that the reading comprehension of good writers was significantly better than that attributed to average writers. Grobe & Grobe (1976) found a similar relationship between reading comprehension and writing performance with college freshmen.

Although these studies indicate that a relationship between reading and writing does exist, there is little empirical evidence as to the nature or extent of the relationship. Research on causal relationships between reading and writing is scarce, although the integration of language arts curricula has long been proposed by leading authorities as a means of improving reading development. Combs (1977) concluded that practice in written sentence-combining had a positive effect on reading comprehension. Doctorow, Wiltrock and Marks (1978) found that sixth grade students who were given paragraph headings and who wrote one-sentence summaries after reading paragraphs showed greater comprehension and recall than students using other methods. Gipe (1979), in a comparison of four methods of vocabulary teaching, found that the most effective was a contextual method which included writing vocabulary words in a context. Bretzing and Kulhavy (1979) found that students who took notes requiring summarizing or paraphrasing recalled significantly more

than those who used other methods or who took no notes at all. In a study of college freshmen, Collins (1979) found that expressive writing practice combined with reading instruction improved reading comprehension significantly more than did reading instruction alone.

Stotsky (1982) has cited the need for research designed specifically to measure the influence of various types of writing practice on the reading performance of secondary and post-secondary students. Shanahan (1980) has noted the need for research on the motivational effect of writing on reading. This study was designed to investigate the effect of writing on reading comprehension, vocabulary, and attitude of college freshmen enrolled in a reading course.

Definitions of terms used in the study are as follows:

Writing Component - a series of writing activities/assignments directly related to reading material being presented. The length of the writing assignment may vary from one sentence to several paragraphs.

Dictation - the practice of reading aloud to students passages of short paragraph length, which they must attempt to duplicate exactly in writing. (Brown, 1915)

Reproduction - active paraphrasing of longer passages, combining elements of both dictation and summary writing, often involving notetaking. Unlike précis writing, it is done without looking at the text. (Stotsky, 1982)

Paraphrase - translation of a passage, approximately the same length as the original, into a reader's own idiomatic language. (Corbett, 1971)

Précis - an abstract or summary which captures the essence of a selection within a required word limit. (Hood, 1967)

Expressive Writing - writing close to the self, having the characteristics of informal talk, and revealing as much about the writer as about the topic. (Britton, et al 1975)

METHOD

Forty students in the first quarter of their freshman year at the University of South Alabama were the subjects of the study. These students were admitted to the University in the Academic Opportunity Program, a developmental program for students who do not meet admission requirements.

Before registration students were randomly assigned to two reading sections arbitrarily designated the control and experimental groups. Two students assigned to the control group never registered, leaving nineteen students in the control group (eleven males, eight females) and twenty-one in the experimental group (twelve males, nine females).

A combination of pretest and posttest control group design and posttest only control group design was used. The same instructor taught both groups. Form F of the Nelson-Denny Reading Test was administered to the groups the first week of the ten-week quarter. The students were told that they would take another form of the test at the end of the quarter and that the results would be used to determine whether they needed more instruction in reading. Each group met for two periods a week, each period consisting of one hour and forty minutes. The reading material for the two groups was the same. They used Kathleen T. McWhorter's College Reading and Study Skills, a text in workbook format. In addition, both groups read selected articles, essays, short stories, and novels. Instruction varied only in the use of the writing component for the experimental group.

The control group did no writing either in or out of class (with the exception of the final examination). Students were assigned reading selections in the text as homework and told to be prepared to go through the worksheets orally in class. They were called upon systematically to recite. Assigned in-class reading was discussed in both large and small groups. Book reports were oral. A vocabulary list, with definitions, was given to the group each week. The instructor pronounced the words and students supplied oral contexts. They were instructed to memorize the definitions and were tested by multiple choice response.

The experimental group read textbook assignments as homework but completed the textbook exercises in writing. They often wrote responses to selected in-class readings before they were discussed. Book reports were written. The group wrote in class at least once each week. The instructor wrote comments on compositions but did not grade them. The modes of writing practiced, according to their appropriateness for the materials read, were dictation, reproduction, paraphrase, précis, and expressive. Some writing assignments included a combination of two or more modes. For example, students might write a précis of an article or a story, and then write expressively about it. The same vocabulary words were given both groups, but the experimental group was required to write a phrase or sentence making a personal response to the word in a context, and were tested by filling blanks with appropriate words in sentence contexts.

The last week of the quarter, each group was administered Form E of the Nelson-Denny. In addition, both groups were given the reading portion of the Estes Attitude Scales.

RESULTS

An analysis of covariance was used to compare the performance of the two groups on the post-test, with scores on the pre-test used as a covariate. Tests for homogeneity of regression indicated parallel regression slopes. There were significant differences between the groups on the Nelson-Denny Total Test, the Vocabulary Subtest, and the Comprehension Subtest (See Table I).

A one-tailed t-test was used to compare the groups on the reading section of the Estes Attitude Scales. No significant differences were found between the groups (See Table II).

DISCUSSION

The results of the study indicate that writing has a positive influence on reading, but raise several questions as well.

The question of short term/long term growth in reading should be examined. Will students retain their gains in comprehension and vocabulary, obtained in a 10 week quarter, over a longer period of time? Will attitudes toward reading change significantly over longer periods of time? Since attitudes are complex and take a long time to develop, it seems logical that they are not likely to change rapidly. These questions should be addressed in follow-up studies of these students and in longitudinal studies of students in language arts programs at all levels.

More research as to exactly how writing influences reading growth would be of great help to teachers and curriculum specialists. Does writing increase sight vocabulary? Does it have a memory-enhancing

effect or does it, as Aukerman (1971) suggests, have the effect of fixing orthographic-phonemic patterns of words in memory so that writing improves students' abilities to analyze unfamiliar words as well as those actually used in writing? How does writing influence comprehension? What part does listening play in writing/reading? Further analyses of the cognitive processes involved in all modes of writing would encourage the development of related reading-writing activities and would give teachers more specific guidance than the conventional advice to "integrate" the language arts.

TABLE I

ANCOVA On Nelson Denny Reading Test Scores

Grp	N	Pre-test Mean	SD	Post-test Mean obs	SD	adj	df	F	p
				TOTAL TEST					
Exper	21	72.57	21.43	79.33	15.25	78.51			
Control	19	69.89	19.95	67.47	18.65	68.38	39	9.20	.004
				VOCABULARY TEST					
Exper	21	34.85	12.56	38.67	10.04	38.70			
Control	19	34.95	10.89	33.37	11.19	33.34	39	6.31	.017
				COMPREHENSION TEST					
Exper	21	37.71	10.65	40.67	7.36	39.88			
Control	19	34.95	10.57	34.11	10.70	34.98	39	5.46	.025

TABLE II

ONE-TAILED T-TEST RESULTS FOR READING SECTION OF ESTES ATTITUDE SCALES

	n	$\bar{X}$	SD	t	
Experimental	21	56.71	9.540	.358	NS
Control	19	58.53	7.947		

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